

United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO. 2190	
09/964,930	09/26/2001	Maurice L. James	005950-742		
7.	590 04/01/2003				
William H. Benz BURNS, DOANE, SWECKER & MATHIS, L.L.P. P.O. Box 1404			EXAMINER		
			KRECK, JOHN J		
Alexandria, VA 22313-1404			ART UNIT	PAPER NUMBER	
		3673			
			DATE MAIL ED: 04/01/2003		

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 07-01)

•		Application No.		Applicant(s)				
Office Action Summary		09/964,930		JAMES ET AL.				
		Examiner		Art Unit				
		John Kreck		3673				
	The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply							
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status								
1)	Responsive to communication(s) filed on	·						
2a) <u></u> □	This action is FINAL . 2b)⊠ Thi	is action is non-fi	nal.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. Disposition of Claims								
4)⊠ Claim(s) <u>1-33</u> is/are pending in the application.								
	4a) Of the above claim(s) <u>1-21</u> is/are withdrawn from consideration.							
5) 🗌	5) Claim(s) is/are allowed.							
6)⊠ Claim(s) <u>22-30,32</u> is/are rejected.								
7)⊠	7)⊠ Claim(s) <u>31 and 33</u> is/are objected to.							
8)	Claim(s) are subject to restriction and/or	r election require	ment.					
Application Papers								
9)[] 7	The specification is objected to by the Examiner	r.						
10)[] 7	Γhe drawing(s) filed on is/are: a)□ accep	ted or b)⊡ object	ed to by the Exar	niner.				
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).								
11) ☐ The proposed drawing correction filed on is: a) ☐ approved b) ☐ disapproved by the Examiner.								
If approved, corrected drawings are required in reply to this Office action.								
12) The oath or declaration is objected to by the Examiner.								
Priority under 35 U.S.C. §§ 119 and 120								
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).								
a) ☐ All b) ☐ Some * c) ☐ None of:								
1. Certified copies of the priority documents have been received.								
2. Certified copies of the priority documents have been received in Application No								
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 								
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).								
a) The translation of the foreign language provisional application has been received.								
15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.								
Attachment(s)								
2) I Notice	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449) Paper No(s)	4) 년 5) 🗌 6) 🗍	Interview Summary Notice of Informal F Other:	(PTO-413) Paper No atent Application (PT	(s). <u> </u>			
.S. Patent and Tr	ademark Office							

`Application/Control Number: 09/964,930 Page 2

Art Unit: 3673

DETAILED ACTION

1. The incorporation of essential material in the specification by reference to a foreign application or patent, or to a publication is improper. Applicant is required to amend the disclosure to include the material incorporated by reference. The amendment must be accompanied by an affidavit or declaration executed by the applicant, or a practitioner representing the applicant, stating that the amendatory material consists of the same material incorporated by reference in the referencing application. See *In re Hawkins*, 486 F.2d 569, 179 USPQ 157 (CCPA 1973); *In re Hawkins*, 486 F.2d 579, 179 USPQ 163 (CCPA 1973); and *In re Hawkins*, 486 F.2d 577, 179 USPQ 167 (CCPA 1973).

Election/Restrictions

- 1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-10, and 21; drawn to a material for plugging a well, classified in class 428, subclass 402.
 - Claims 11-20, drawn to a method or forming a material for plugging a well, classified in class 264, subclass 239.
 - III. Claims 22-33, drawn to method of plugging a well, classified in class 166, subclass 292.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I and III are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the

Application/Control Number: 09/964,930

Art Unit: 3673

process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the product could be used in a process of lining a landfill.

- 3. Inventions II and I are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the product could be made in a non-rolling die.
- 4. Since the process of making (group II) is distinct from the product made (group I); a three way restriction is proper (MPEP 806.05(i)). Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.
- 5. During a telephone conversation with William Benz on 3/12/03 a provisional election was made without traverse to prosecute the invention of group III, claims 22-33. Affirmation of this election must be made by applicant in replying to this Office action. Claims 1-22 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.
- 6. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim

Application/Control Number: 09/964,930 Page 4

Art Unit: 3673

remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 28 and 30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 28 recites the limitation "the hot water". There is insufficient antecedent basis for this limitation in the claim. Claim 28 has been examined as if it depends form claim 27.

Claim 30 recites the limitation "the saline water". There is insufficient antecedent basis for this limitation in the claim. Claim 30 has been examined as if it depends form claim 29.

Claim Rejections - 35 USC § 102 and 35 USC § 103

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 3673

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 8. Claims 22-25 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Armentrout (U.S. Patent number 2,836,555).

Armentrout teaches a method of plugging a well comprising introducing a plurality of nodules into the well, the nodules comprising bentonite in admixture with water and permitting the nodules to come in contact with additional water, in an amount and for a time adequate to cause the nodules to swell and form a substantially hydraulically solid plug in the well. Armentrout fails to explicitly disclose the proportion of water to form compacted nodules having a density of 2.0g/cc; mean particle survival at crush of 800 N and 50% survival at a drop of 1.5 meters onto concrete. Armentrout does however disclose a nodule with water content similar to that disclosed by applicant and compression forces similar to those disclosed by applicant. Since the Armentrout nodules have a similar composition (see col. 5, line 15 for water content) and are compacted with the same forces; it is apparent that the density, crush force, and drop survival as called for in claim 22 are inherent in the Armentrout nodules. See MPEP 2112.

With regards to claim 23; Armentrout teaches the introducing into the bottom of the well by falling.

Art Unit: 3673

Armentrout also teaches the introducing over the length of the well as called for in claim 24.

Armentrout also teaches the introducing the nodules into one portion of the length of the well and introducing nonbentonite material (cement, see col. 5, lines 3-10) over at least one other portion as called for in claim 25.

9. Claims 29 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Armentrout.

Armentrout fails to explicitly teach the saline water in the well. Saline water is common in wells, (as disclosed on page 5, line 4 of applicant's specification) especially in offshore wells. It would have been obvious to one of ordinary skill in the art at the time of the invention to have practiced the Armentrout invention in a well with saline water as called for in claim 29, in order to plug an offshore well.

Armentrout teaches spheres, but fails to teach the diameter from about 1 inch to 6 inches.

It would have been obvious to one of ordinary skill in the art at the time of the invention to have to make the nodules of Armentrout having a diameter of from about 1 inch to 6 inches, in order to plug larger holes, for example; since such a modification would have involved a mere change in size. A change in size is generally recognized as being within the level of ordinary skill in the art. In re Rose 105 USPQ 237 (CCPA 1955).

Application/Control Number: 09/964,930

Art Unit: 3673

10. Claims 26-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Armentrout in view of Fraser (U.S. Patent number 47,410).

The Armentrout reference fails to explicitly disclose the introducing heat into the well, introducing hot water into a well containing viscous material, or introducing hot water before the nodules.

It is well known and old to use hot water in wells, in order to reduce the viscosity of viscous materials. This is taught by Fraser. It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the Armentrout method to have included introducing heat into the well, as called for in claim 26; introducing hot water into the well to reduce the viscosity of viscous material as called for in claim 27; or introducing hot water prior to introducing the nodules as called for in claim 28. This would have been obvious in order to help improve the well flow, as taught by Fraser.

Allowable Subject Matter

11. Claims 31 and 33 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 30 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Art Unit: 3673

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Klaas (U.S. Patent number 2,935,472) teaches similar methods which utilize nodules coated with a meltable coating; Armentrout (U.S. Patent number 2,634,098 and U.S. Patent number 2,642,268) and Alexander, et al. (U.S. Patent number 4,462,470) teach similar methods.

Page 8

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Kreck whose telephone number is (703)308-2725. The examiner can normally be reached on M-F 6:00 am - 3:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather Shackelford can be reached on (703)308-2978. The fax phone numbers for the organization where this application or proceeding is assigned are (703)305-3597 for regular communications and (703)305-7687 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)306-4177.

John Kreck Examiner Art Unit 3673

JJK March 26, 2003